U.S. Patent Application No.: 10/535,045

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First Named Inventor: Utsunomiya

## **Amendments to the Claims**

This is a complete listing of claims and supersedes all other listings:

1. (Currently amended) A photosensitive resin composition comprising

a poly((meth)acrylic acid)-based water-soluble photo-sensitive resin (A) having an acid value of 170 mgKOH/g or more on a solid basis;

the resin (A) being formed of a ((meth)acrylic acid)-based polymer in which a compound represented by formula (1):

[(]wherein R<sup>1</sup> represents H or Me; and R<sup>2</sup> represents a linear or branched C2-C10 alkylene group[)], has been added to portions of the carboxylic-carboxyl groups [,] of (meth)acrylic acid composing the ((meth)acrylic acid)-based polymer,

a photopolymerization initiator (B); and water (C).

- 2. (Original) A photosensitive resin composition according to claim 1, wherein the carboxyl groups of the ((meth)acrylic acid)-based polymer to which the compound represented by formula (1) has not been added are at least partially neutralized with an alkali.
- 3. (Currently amended) A method for forming a hydrogel <del>characterized</del> by <del>comprising</del> subjecting <del>a the</del> photosensitive resin composition as recited in claim 1 to photopolymerization.
- 4. (Currently amended) A hydrogel produced by <u>eausing-subjecting</u> a photosensitive resin composition to <u>photopolymerize photopolymerization</u>, the photosensitive resin composition comprising

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a poly((meth)acrylic acid)-based water-soluble photo-sensitive resin (A) having an acid value of at least about 170 mgKOH/g on a solid basis;

the resin (A) being formed of a ((meth)acrylic acid)-based polymer in which a compound represented by formula (1):

$$\begin{array}{c|c} & O & H_2 \\ \hline \\ C & O & C \\ \hline \\ R^1 & C & C \\ \hline \end{array} \qquad \begin{array}{c} H_2 \\ C & C \\ \hline \\ C & C \\ \end{array} \qquad \begin{array}{c} CH_2 \\ C \\ \end{array} \qquad (1)$$

[()] wherein R<sup>1</sup> represents H or Me; and R<sup>2</sup> represents a linear or branched C2-C10 alkylene group [,)], has been added to portions of the carboxylic-carboxyl groups [,] of (meth)acrylic acid composing the ((meth)acrylic acid)-based polymer,

a photopolymerization initiator (B); and water (C).

5. (Previously presented) A hydrogel according to claim 4, wherein the carboxyl groups of the ((meth)acrylic acid)-based polymer to which the compound represented by formula (1) has not been added are at least partially neutralized with alkali.